

YOUR PERSONALITY TYPE IS: LOGICIAN (INTP-A)



MIND

This trait determines how we interact with our environment.



ENERGY

This trait shows where we direct our mental energy.



NATURE

This trait determines how we make decisions and cope with emotions.



JUDGING



TACTICS

This trait reflects our approach to work, planning and decision-making.



IDENTITY

TURBULENT

This trait underpins all others, showing how confident we are in our abilities and decisions.▼



*picture from 16personalities.com

Personality Predictor

By Daniel Vega

Introduction

The Myers–Briggs Type Indicator (MBTI) is based on the conceptual theory proposed by Carl Jung, who had speculated that humans experience the world using four principal psychological functions – sensation, intuition, feeling, and thinking – and that one of these four functions is dominant for a person most of the time.

PERSONALITY TYPES KEY



Extroverts

are energized by people, enjoy a variety of tasks, a quick pace, and are good at multitasking.



Introverts

often like working alone or in small groups, prefer a more deliberate pace, and like to focus on one task at a time.



Sensors

are realistic people who like to focus on the facts and details, and apply common sense and past experience to come up with practical solutions to problems.



Intuitives

prefer to focus on possibilities and the big picture, easily see patterns, value innovation, and seek creative solutions to problems.



Thinkers

tend to make decisions using logical analysis, objectively weigh pros and cons, and value honesty, consistency, and fairness.



Feelers

tend to be sensitive and cooperative, and decide based on their own personal values and how others will be affected by their actions.



Judgers

tend to be organized and prepared, like to make and stick to plans, and are comfortable following most rules.



Perceivers

prefer to keep their options open, like to be able to act spontaneously, and like to be flexible with making plans.

SOURCE: "Do What You Are: Discover the Perfect Career for You Through the Secrets of Personality Type" by Paul D. Tieger, Barbara Barron, Kelly Tieger

BUSINESS INSIDER

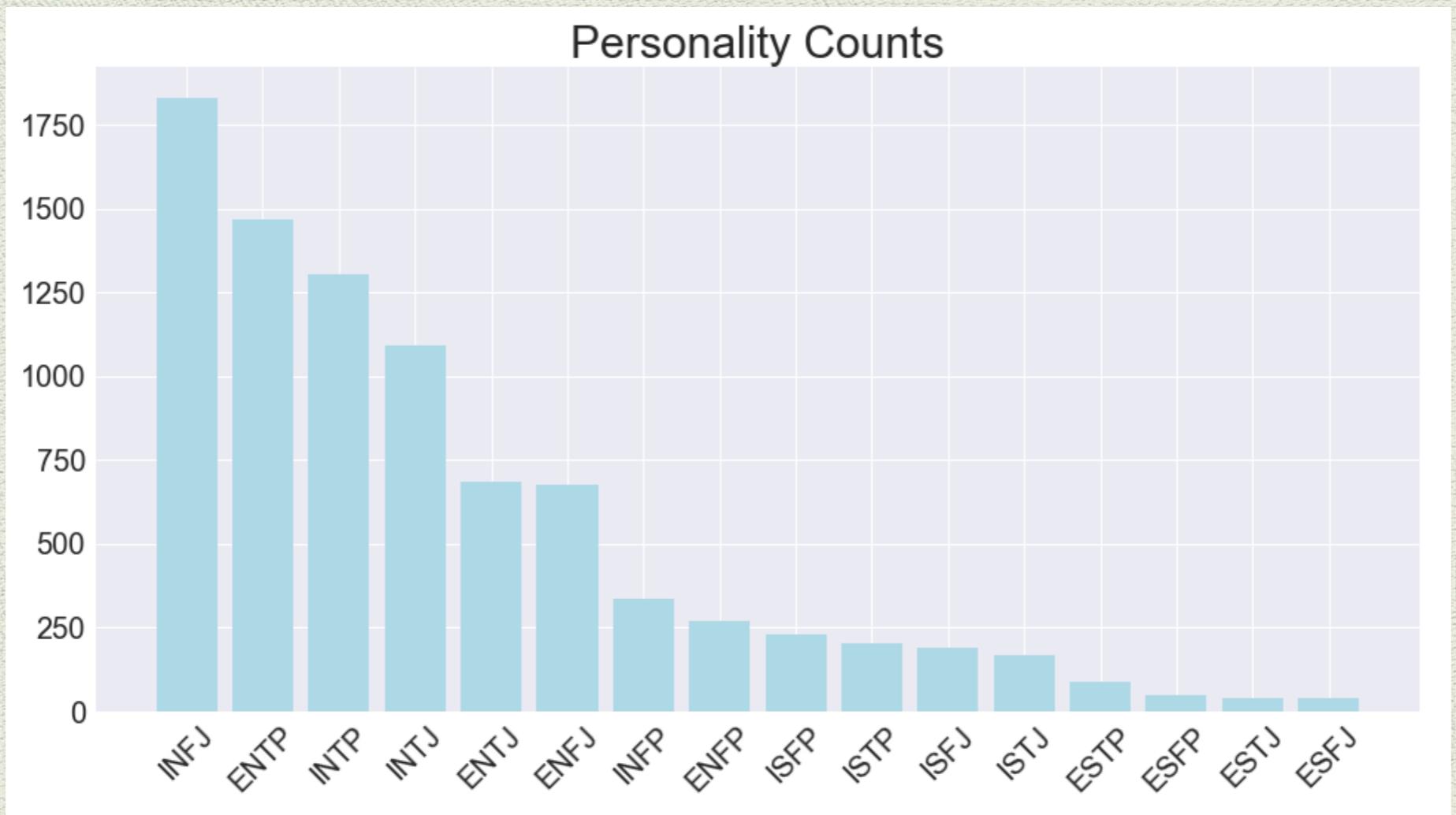
Project Overview

The data was collected from the Personality Cafe Forum:

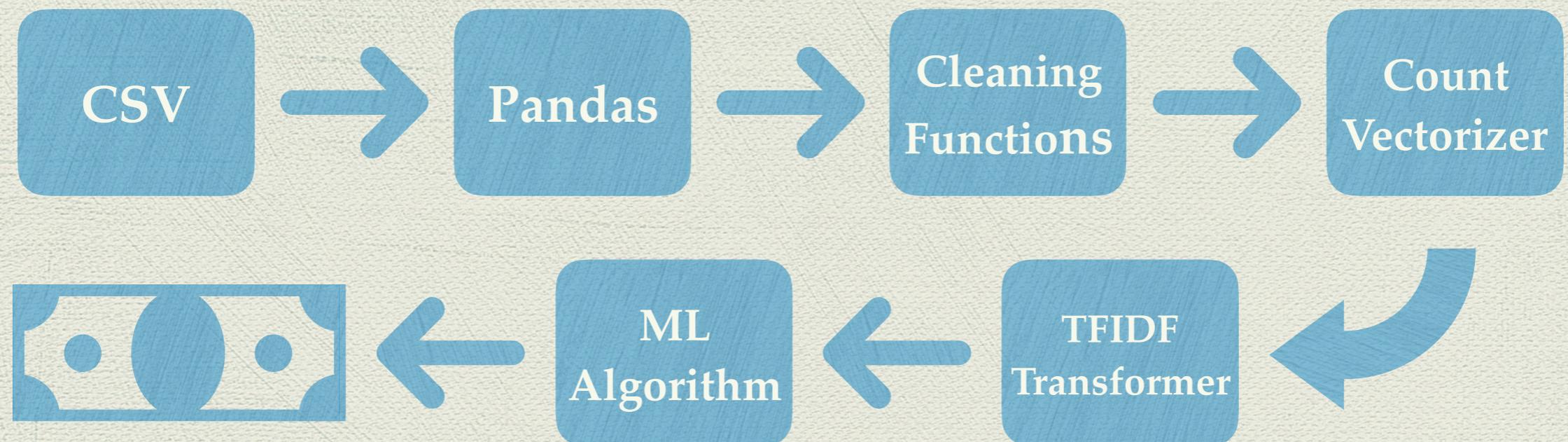
- ◆ 8600 observations
- ◆ Last 50 posts of each user
- ◆ Each user is labeled with their corresponding MBTI

Exploratory Data Analysis

Our EDA showed that we have very unbalanced data. This will be an issue when we get to modeling. It also showed that the least common personalities in the population were the MOST represented in our dataset.



Data Pipeline



Model Selection

The following models were made:

- | | |
|------------------------------|-------------------|
| Naive Bayes | Accuracy = 22.05% |
| Logistic Regression | Accuracy = 63.00% |
| Random Forest Classifier | Accuracy = 36.15% |
| Gradient Boosting Classifier | Accuracy = 65.08% |
| Support Vector Machine | Accuracy = 67.00% |

E/I N/S T/F J/P

After splitting the targets from 16 to 4, our accuracy goes to 78%

Deep Learning

Built a Neural Network with accuracy of 98.66%
This is what the confusion matrix looked like:

Sentiment / Emotional Analysis

Used a lexicon, which was created by the National Research Council Canada, to derive emotions from the text.

INTP



ESTJ



Conclusion

The next step would be to see how it performs in a setting where the purpose of the conversation is not to discuss personality types.

Feel free to test the model.

Questions?

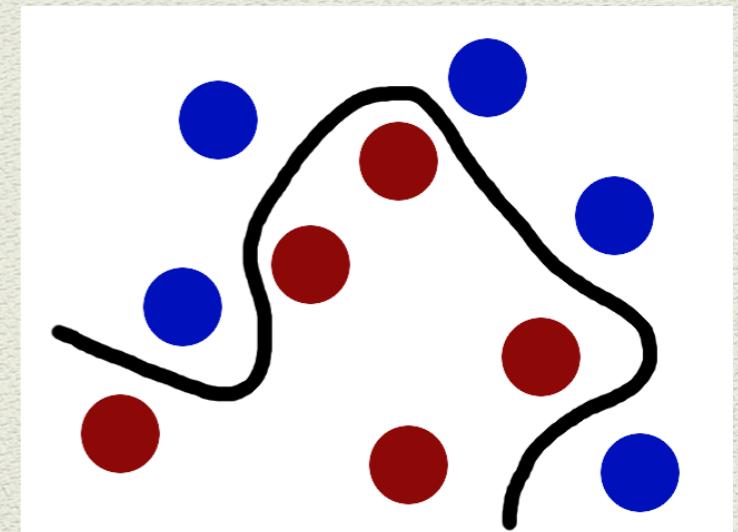
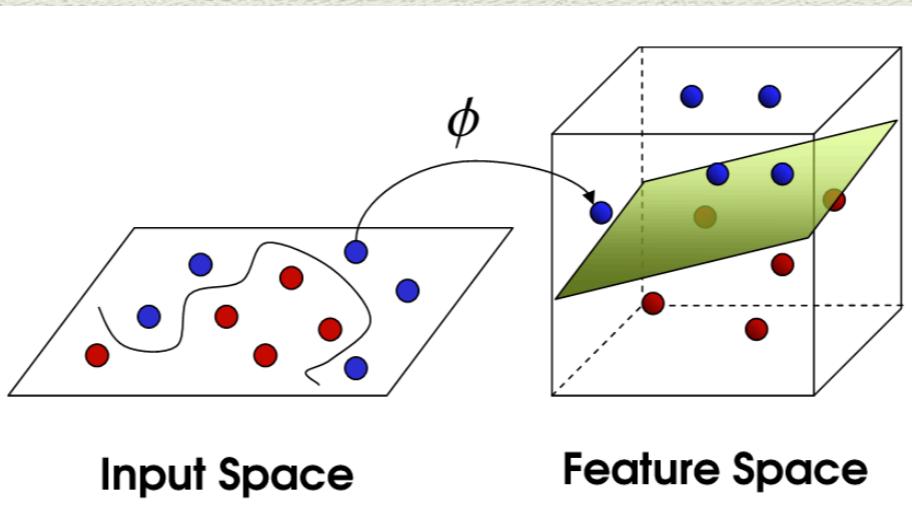
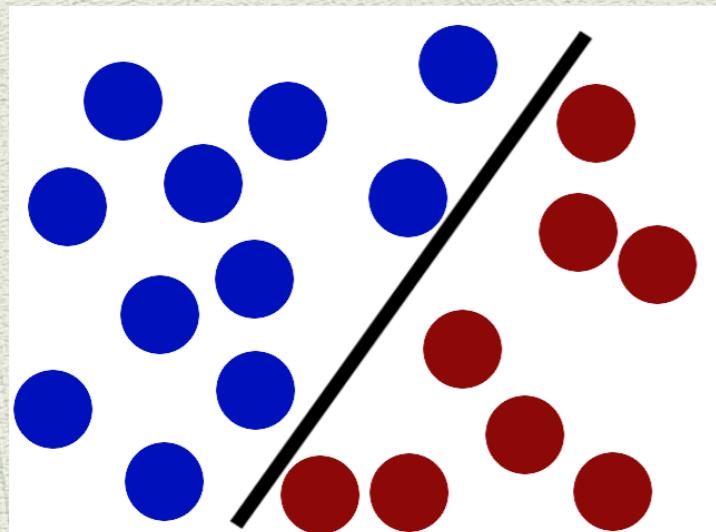
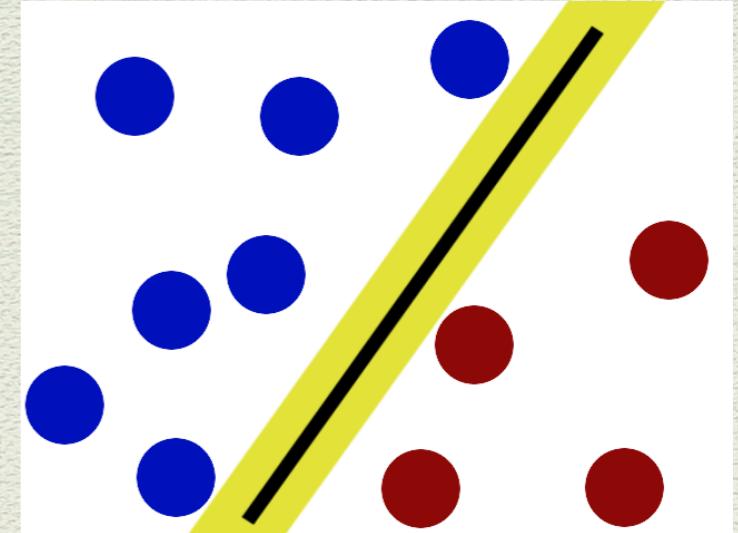
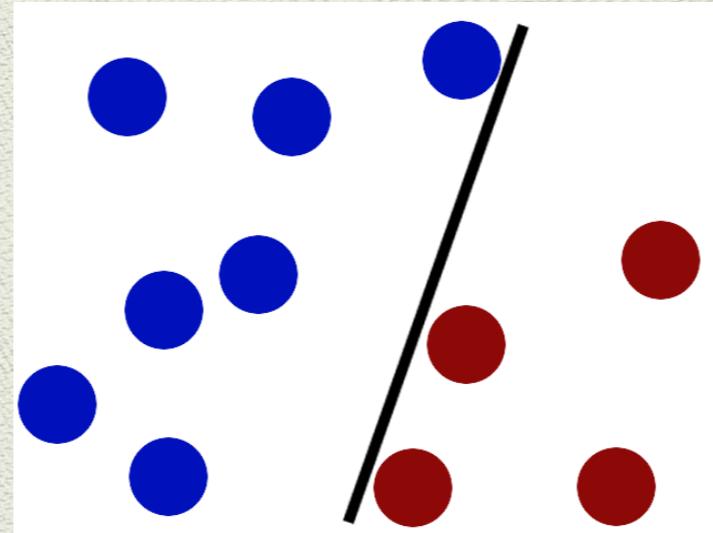
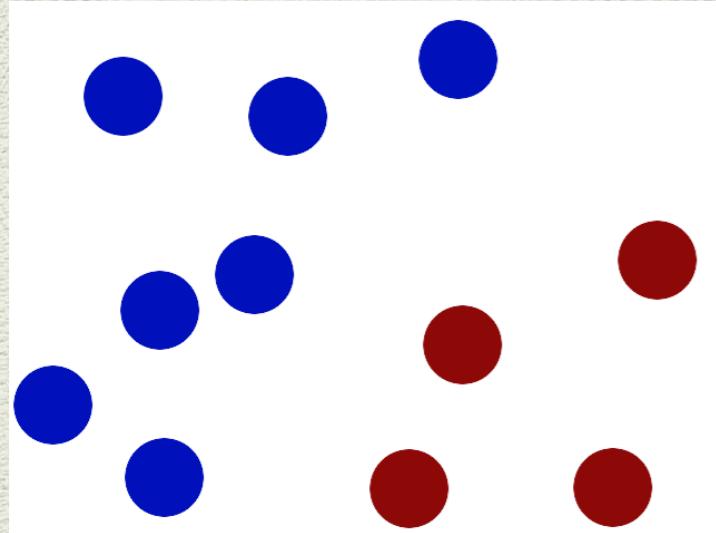
WHERE? WHEN? WHY?
Q&A WHO? WHAT?
WHY? HOW? WHEN?
WHO? WHAT? WHERE? WHEN?
WHY? HOW?

Appendix

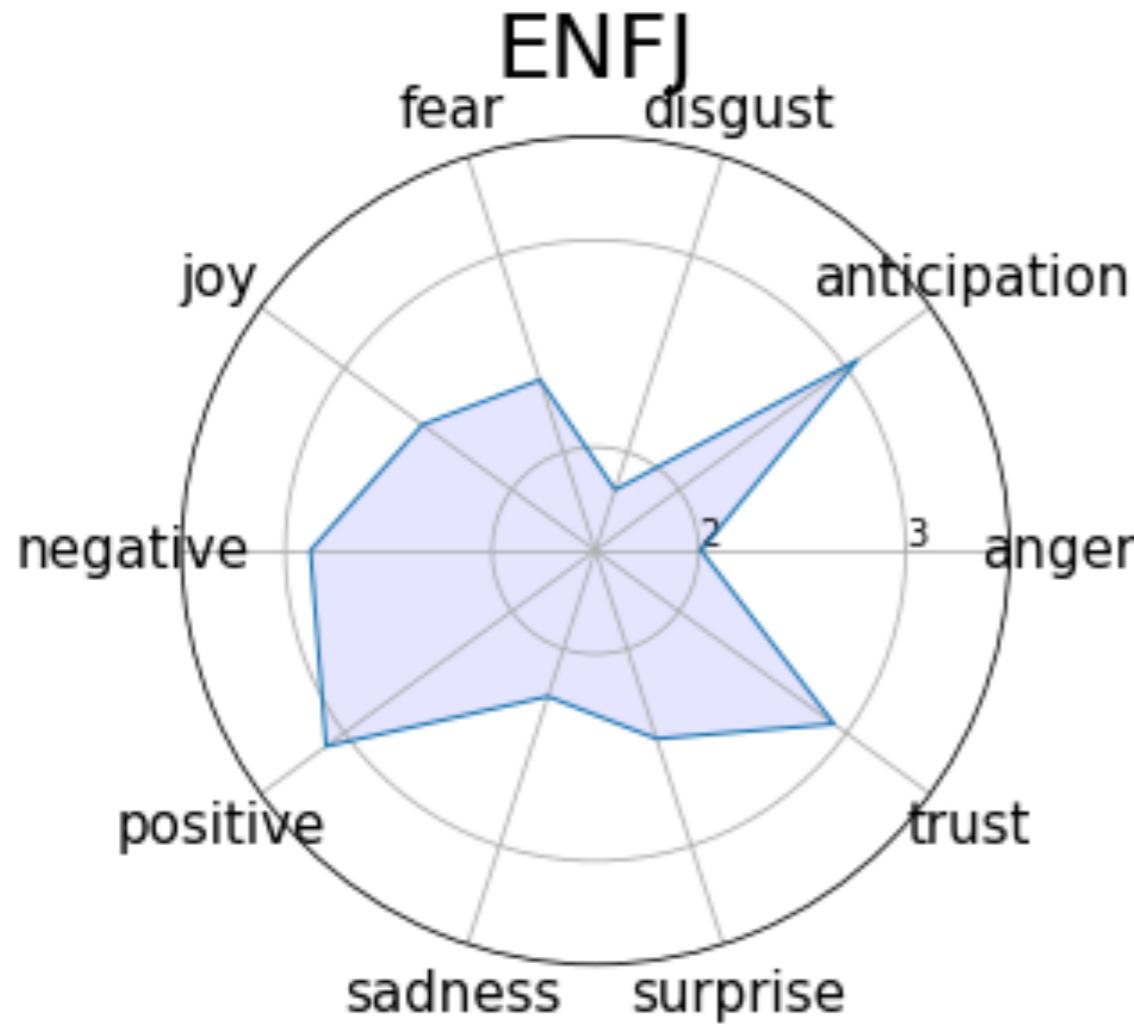
- ◆ Deep Learning

- ◆ 1 hidden layer (500 nodes)
- ◆ Relu activation
- ◆ 0.5 dropout
- ◆ Batch size 500
- ◆ 15 Epochs
- ◆ SVM

Support Vector Machine

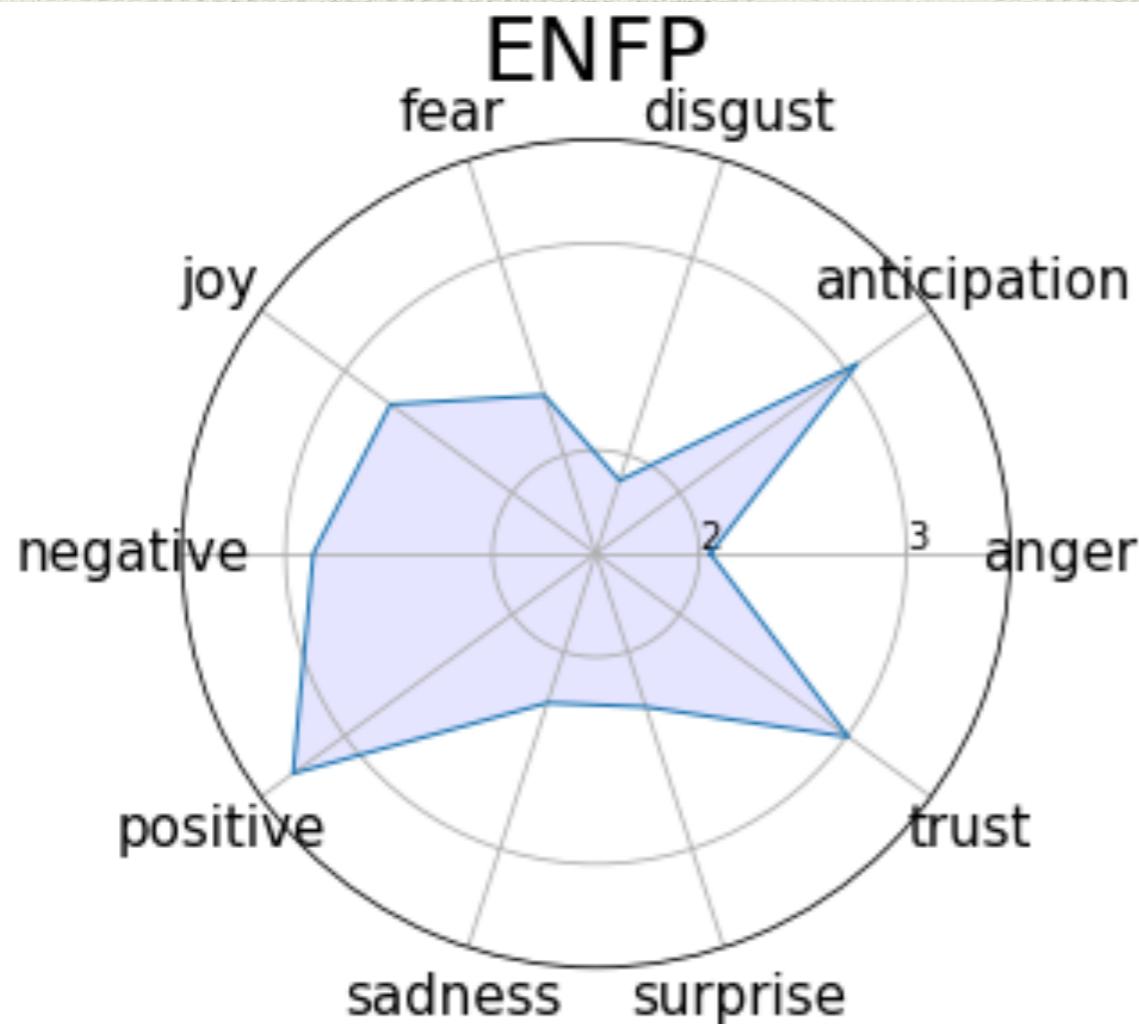


ENFJ



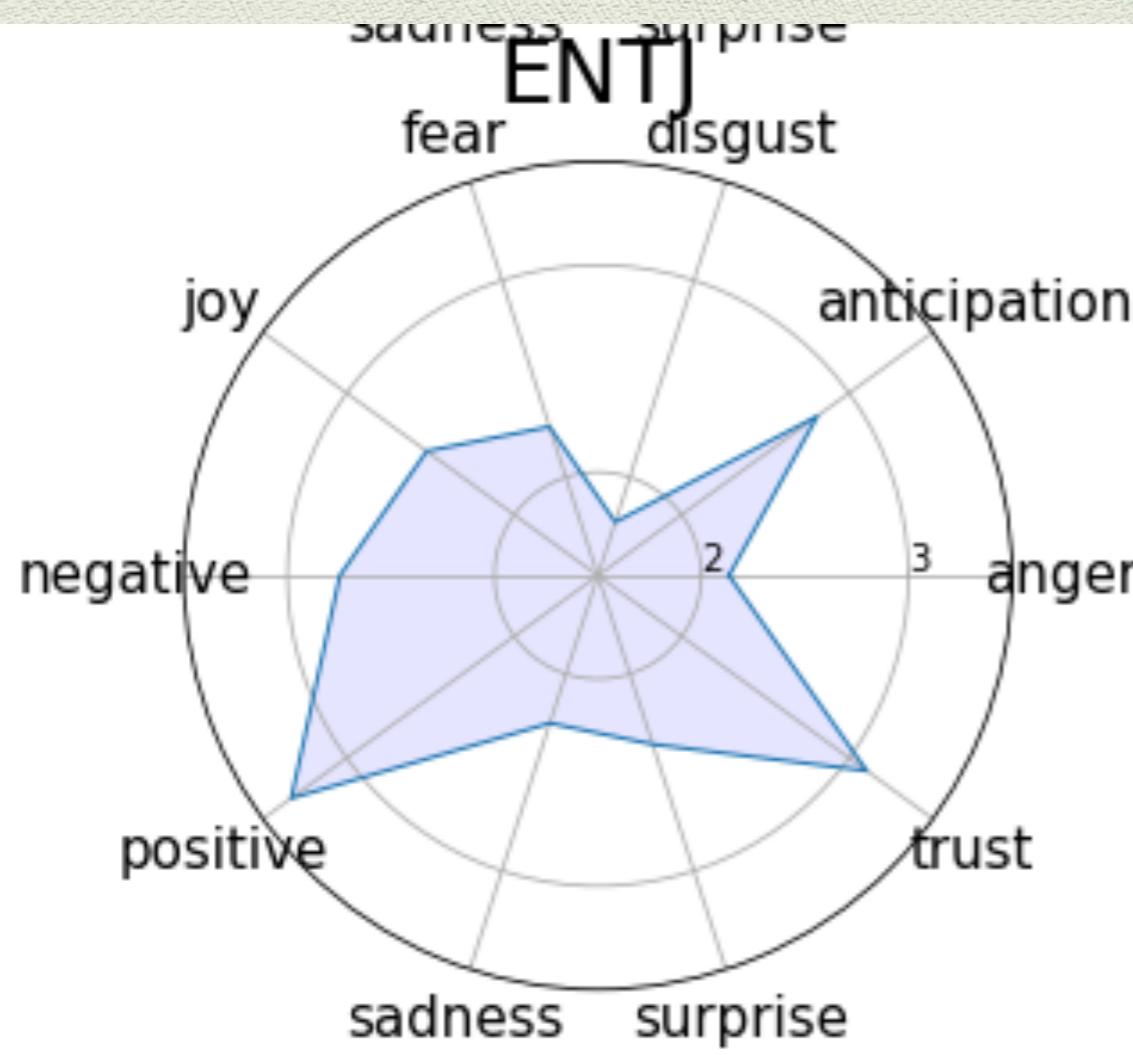
A word cloud visualization showing the frequency and context of various words used by a user over time. The most prominent words include 'thank', 'love', 'post', 'try', 'good', 'make', 'year', 'welcom', 'want', 'person', 'read', 'sound', 'sometime', 'friend', 'talk', 'work', and 'haha'. Each word is surrounded by smaller, related words in a semi-transparent font.

ENFP



sure test
definit two
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well actual
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talk back
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ENTJ



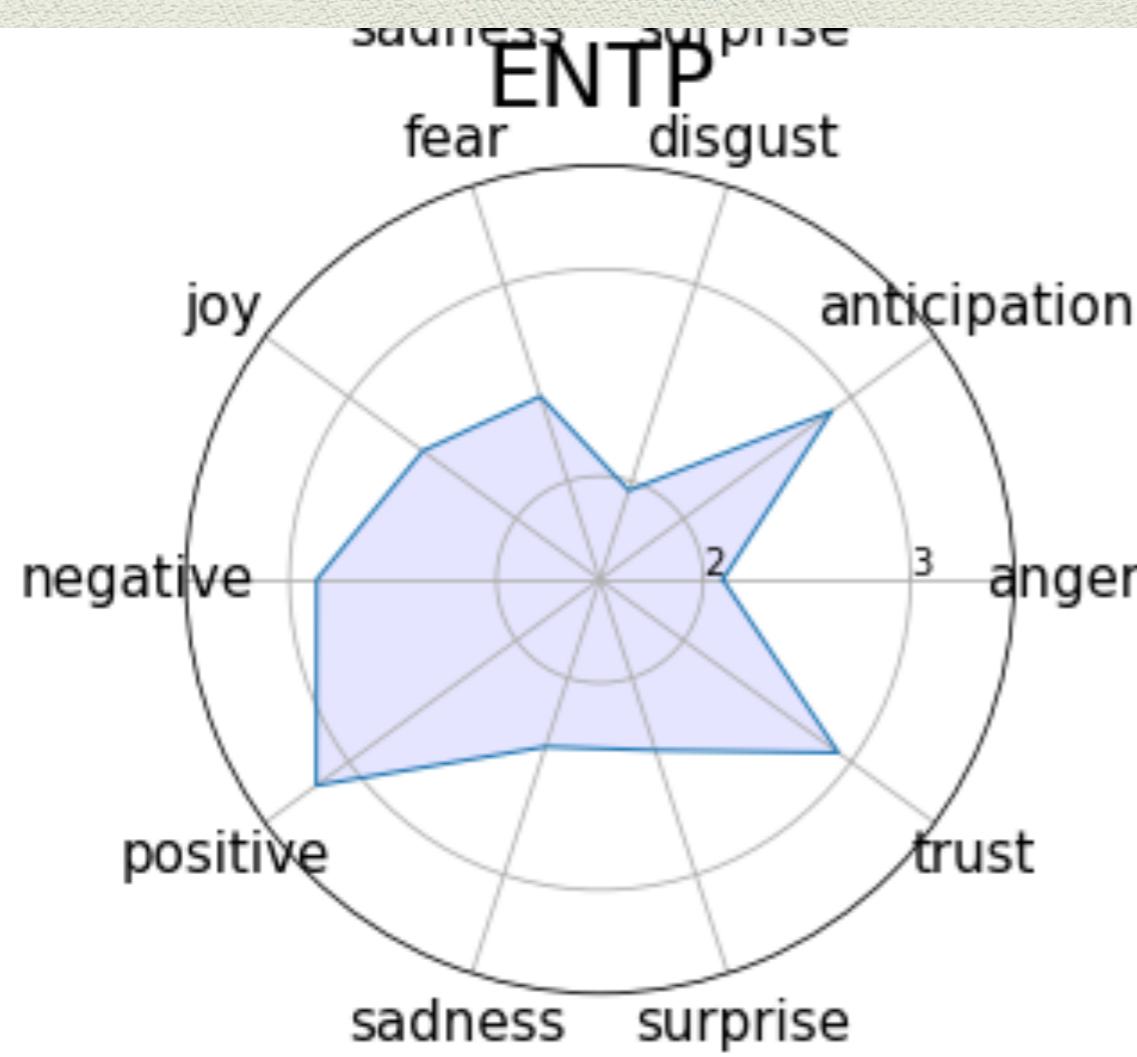
A word cloud visualization showing the frequency and context of various words from a dataset. The words are represented by different sizes and colors, indicating their importance or specific context.

The most prominent words include:

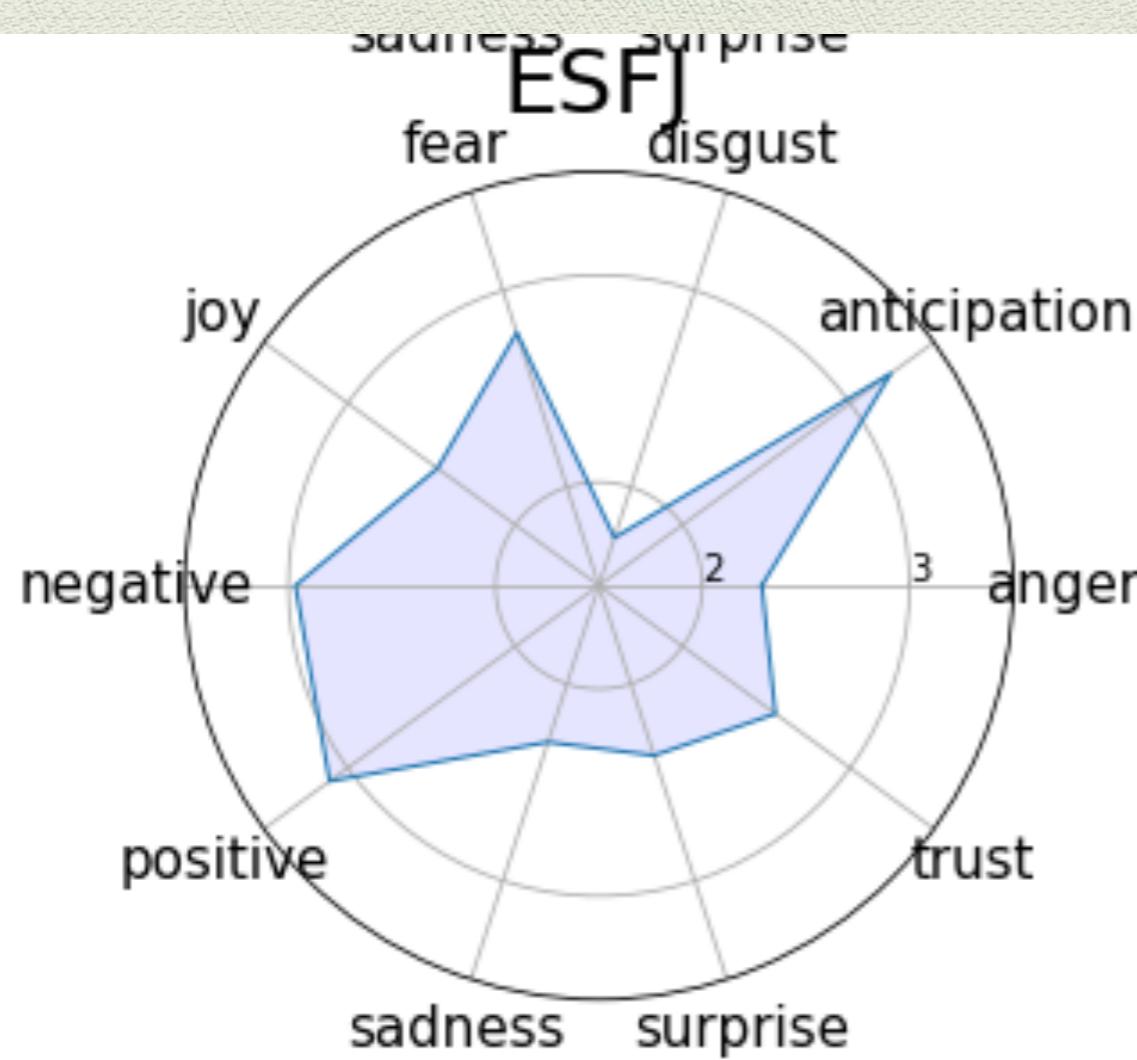
- first**: short, summer, anyone, anywhere
- find**: always, came, explain
- use**: mean, way, emot, even
- work**: got, re, last
- love**: take, help
- make**: good, friend, colleg
- well**: tri, ni, yeah, book, whi, onli
- thought**: start, high, lot
- never**: say, best, post, present
- interest**: co, great, back, abus, ask
- definit**: ok, complet., listword
- veri**: y, year, tell
- seem**: ever, dear, total
- look**: se

Other notable words include: job, previous, hard, introvert, person, agree, see, life, similar, guy, sure, still, understand, understand, want, onli, fuck, lol, kind, need, make, good, thought, start, high, lot, never, say, yes, best, post, present, interest, co, great, back, abus, ask, definit, ok, complet., listword, veri, y, year, tell, seem, ever, dear, total, look, se.

ENTP

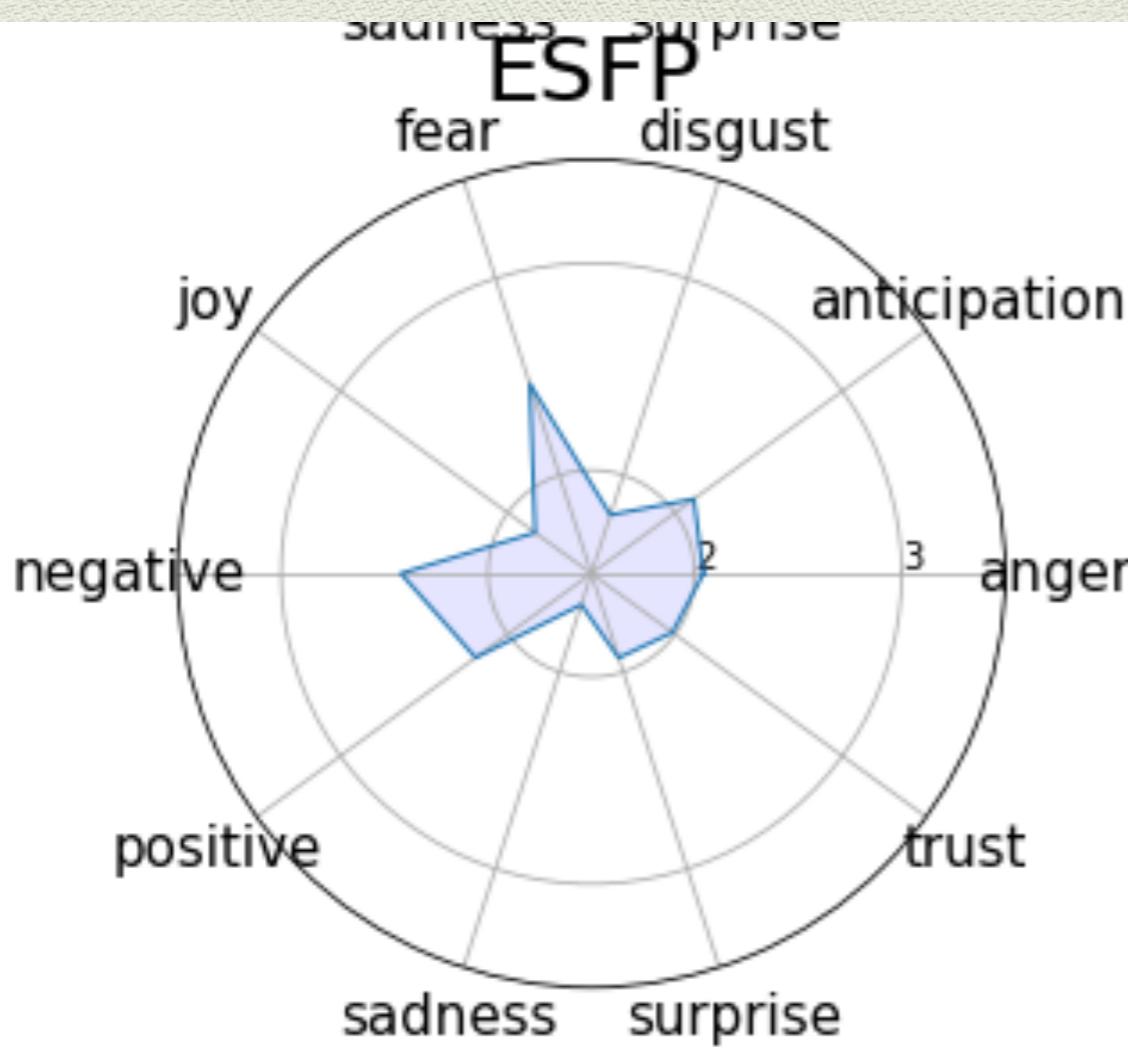


ESFJ



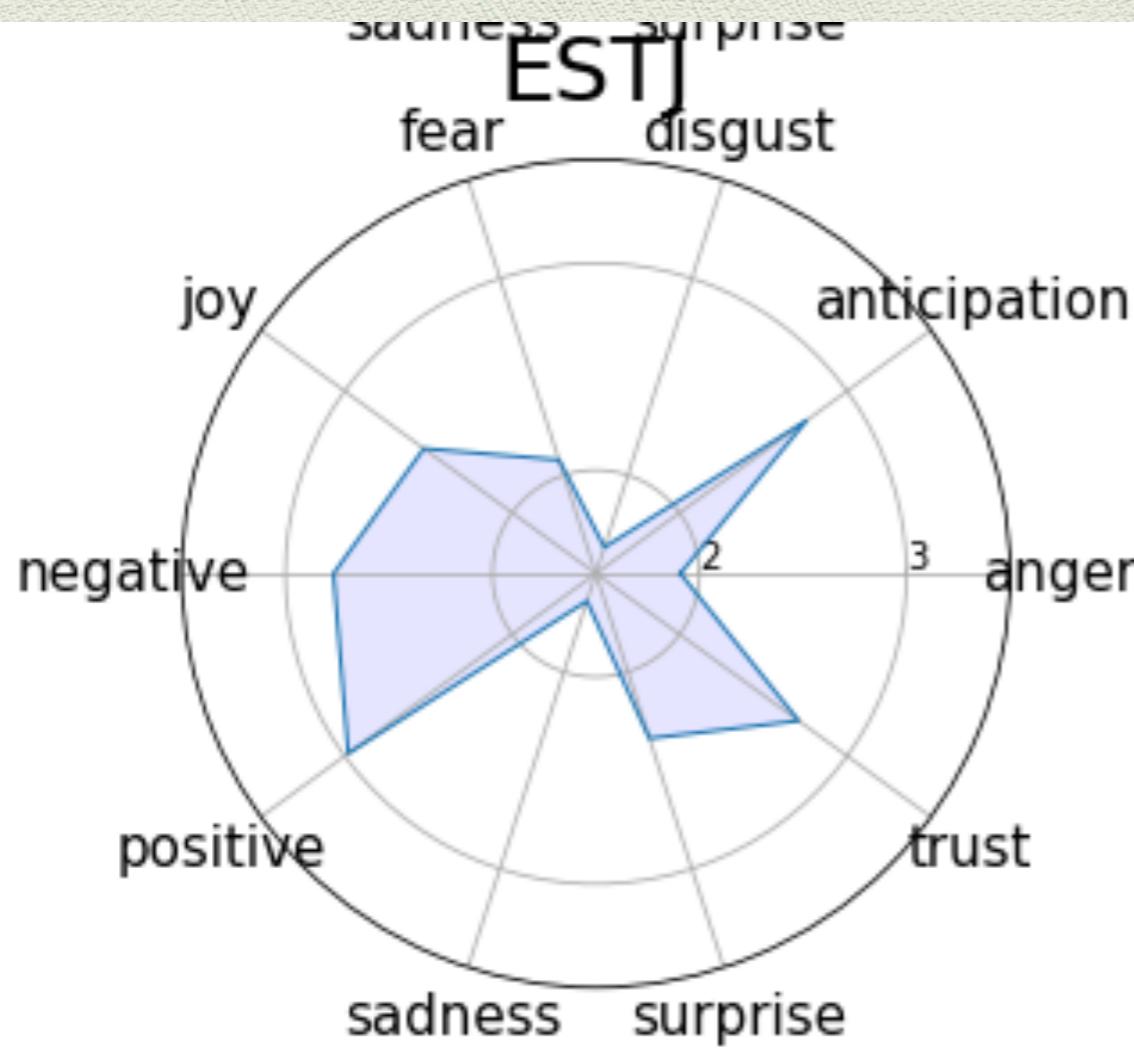
A word cloud visualization showing the frequency of various words in a dataset. The words are represented as colored circles, with their size indicating frequency. The most frequent words are 'major', 'course', 'want', 'first', 'boy', 'spoiler', 'man', 'final', 'tag', 'forum', 'anyon', 'veri', 'understand', 'friend', and 'post'. Other prominent words include 'look', 'meet', 'listen', 'seem', 'usual', 'final', 'tag', 'see', 'see', 'anyon', 'veri', 'understand', 'friend', and 'post'.

ESFP



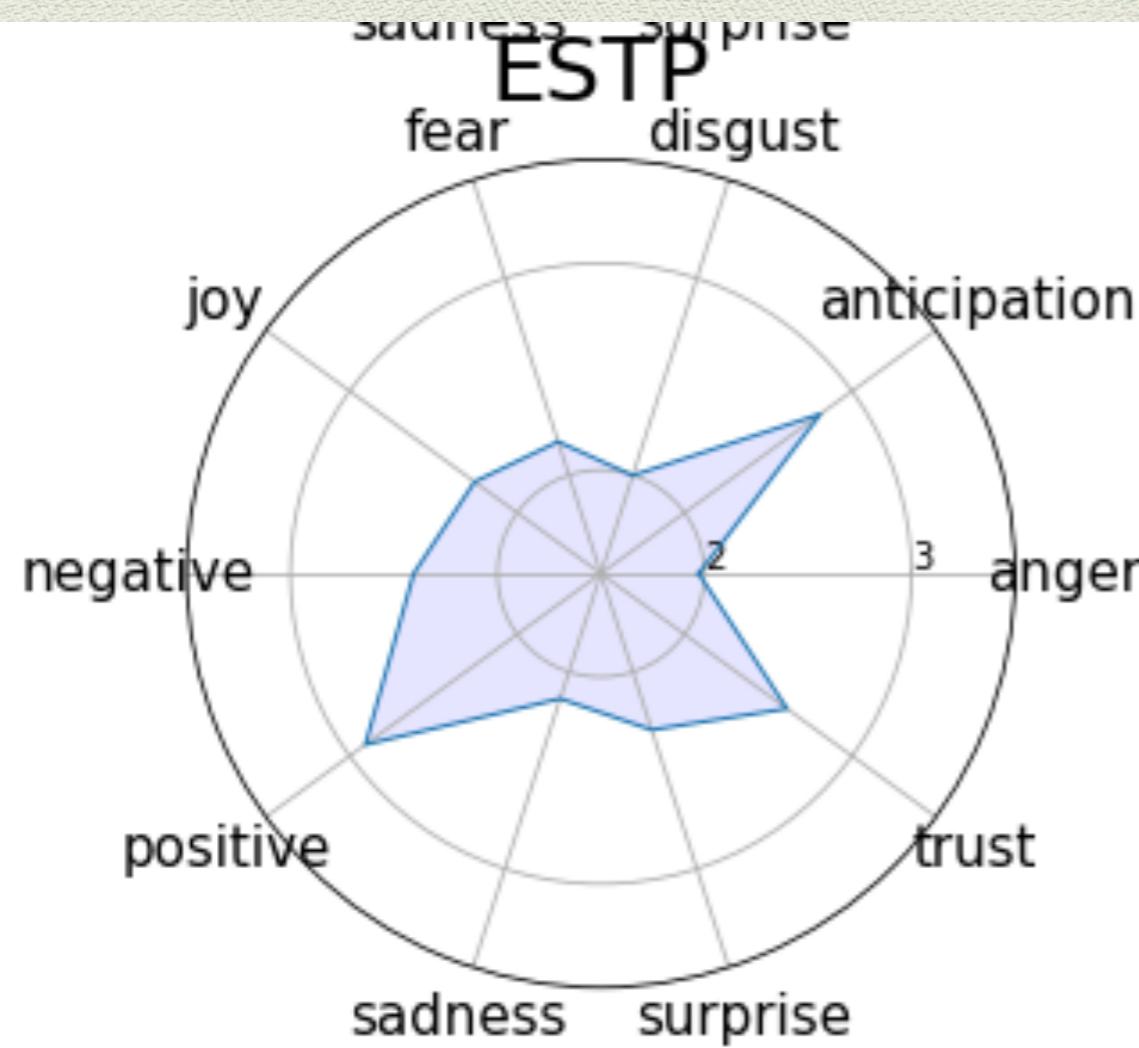
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ESTJ



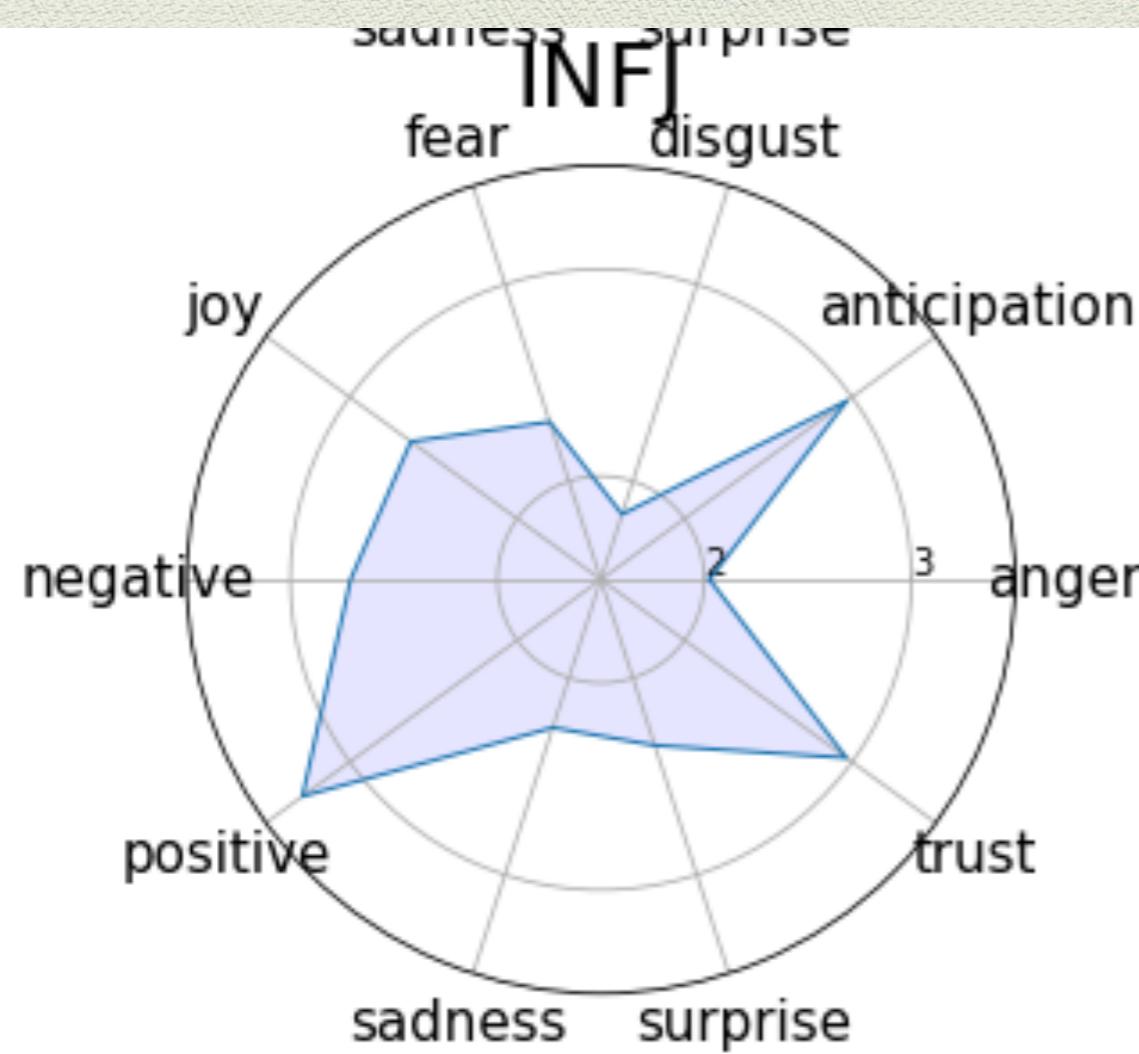
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ESTP



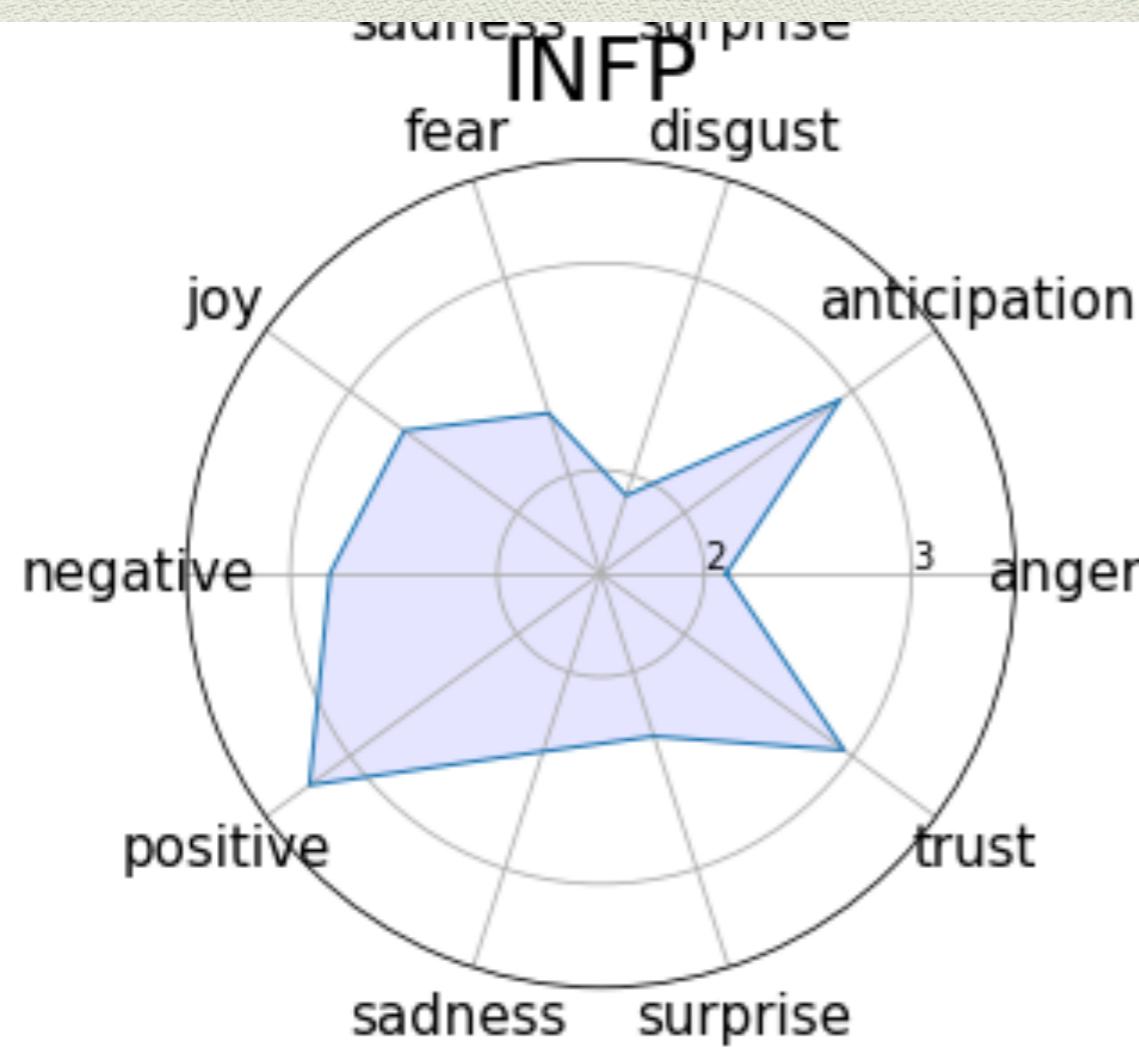
A word cloud visualization showing the frequency and context of various words used in online communication. The size of each word indicates its overall frequency, while the color and position provide contextual information. Key words include 'say', 'friend', 'work', 'watch', 'tend', 'seem', 'thank', 'read', 'sound', 'onli', 'want', 'need', 'goveri', 'long', 'prefer', 'honest', 'actua', 'hahaface', and 'actual'. The word 'life' is present in the top left corner.

INFJ

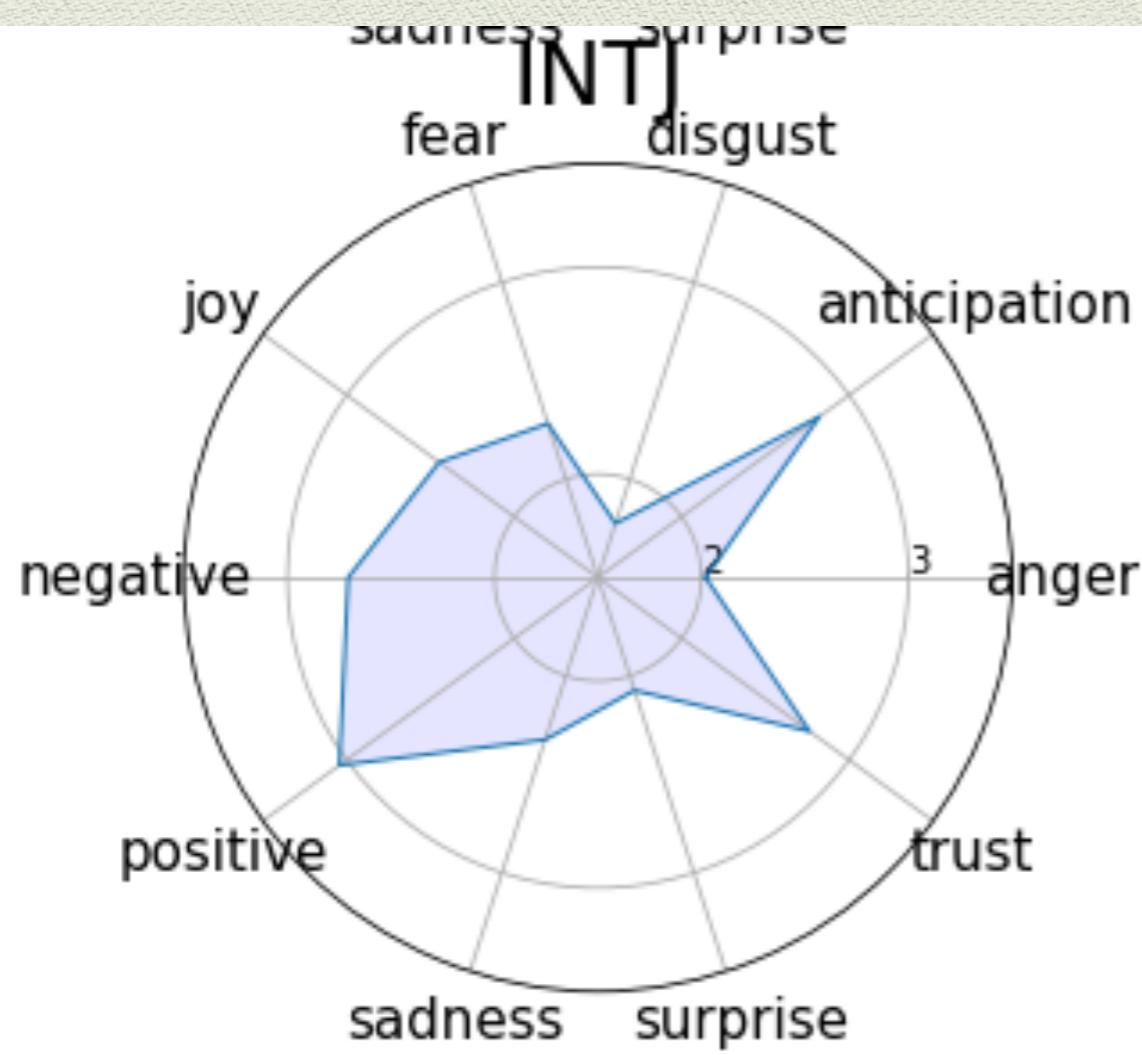


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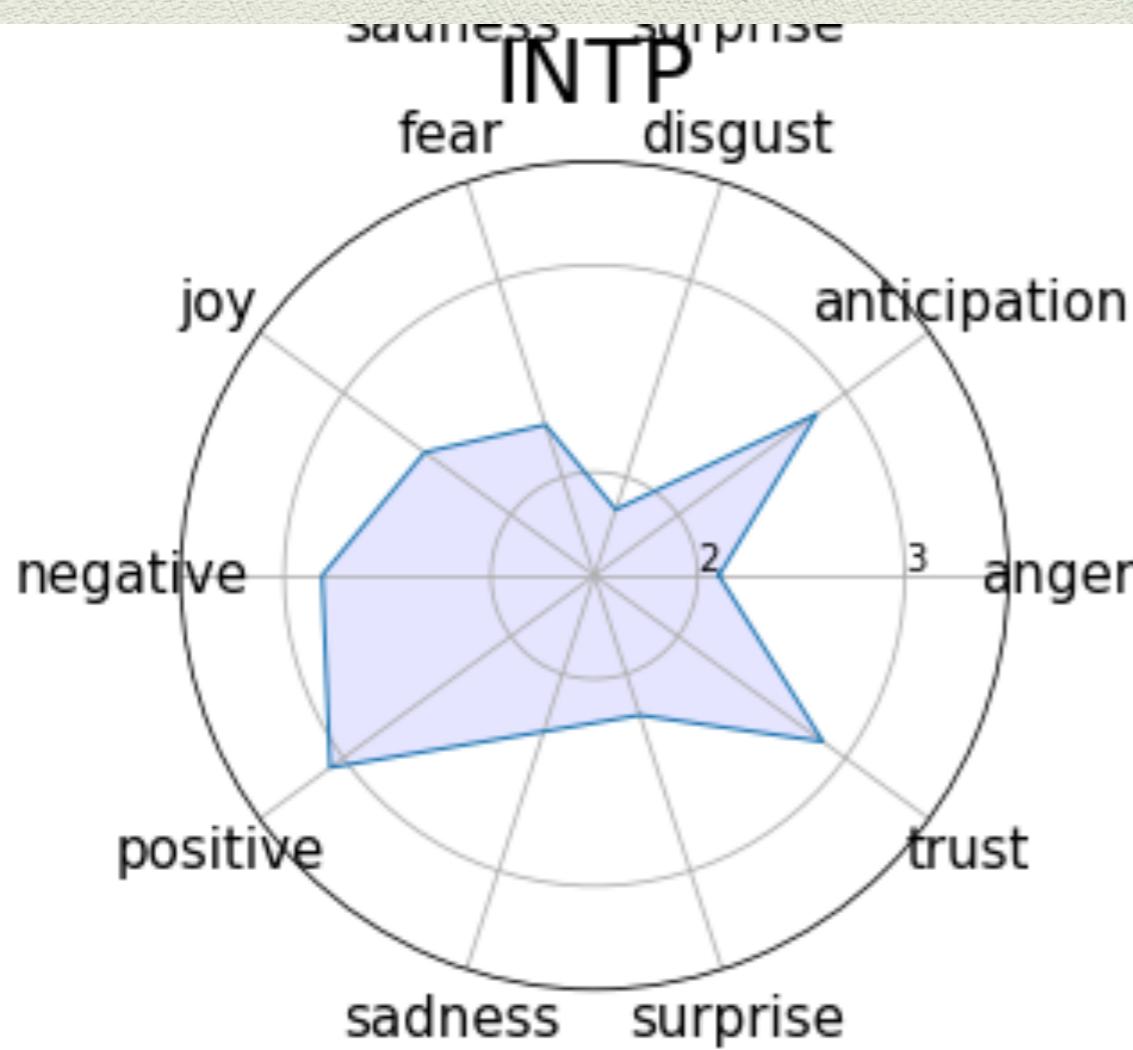
INFP



INTJ

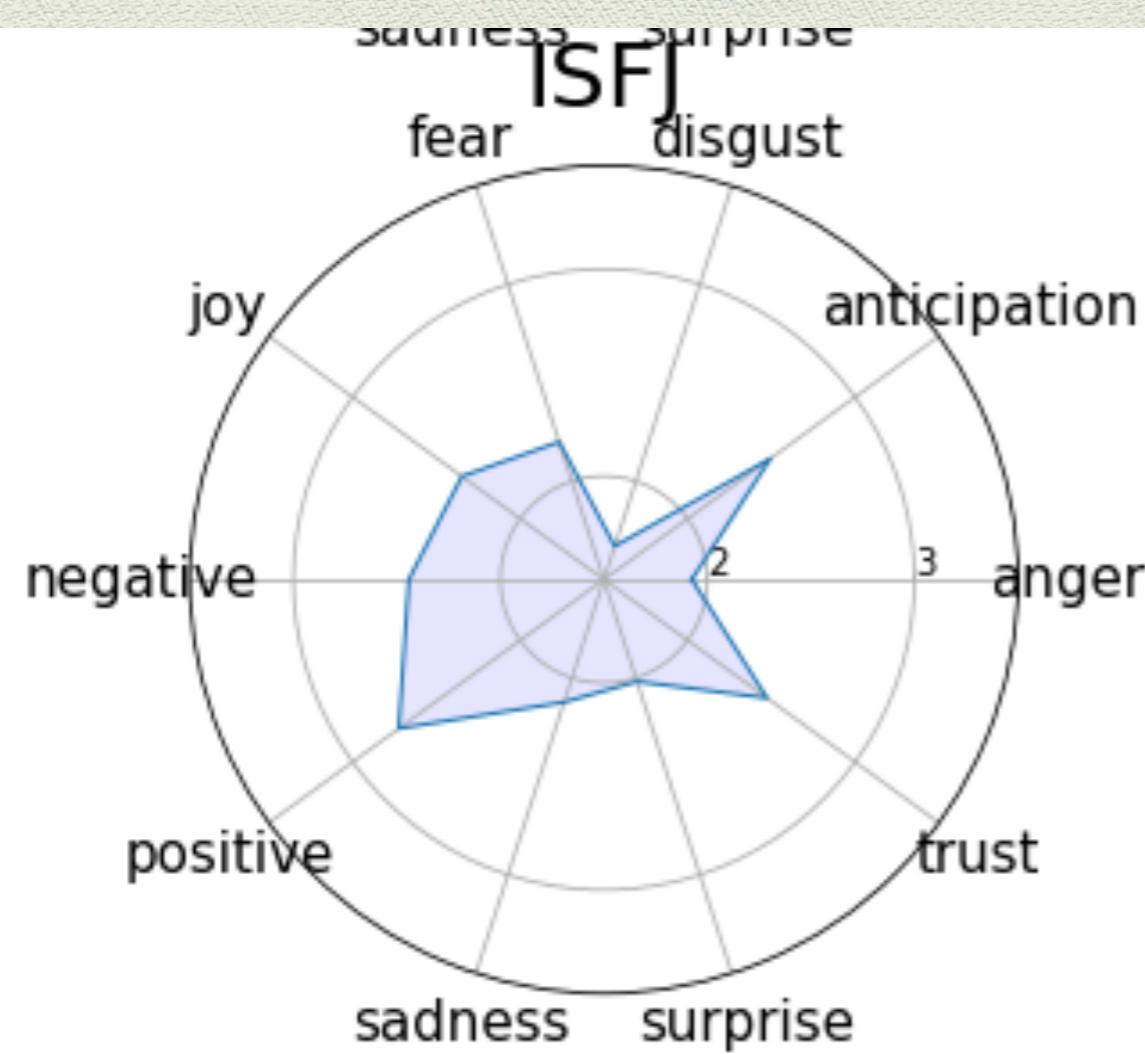


INTP



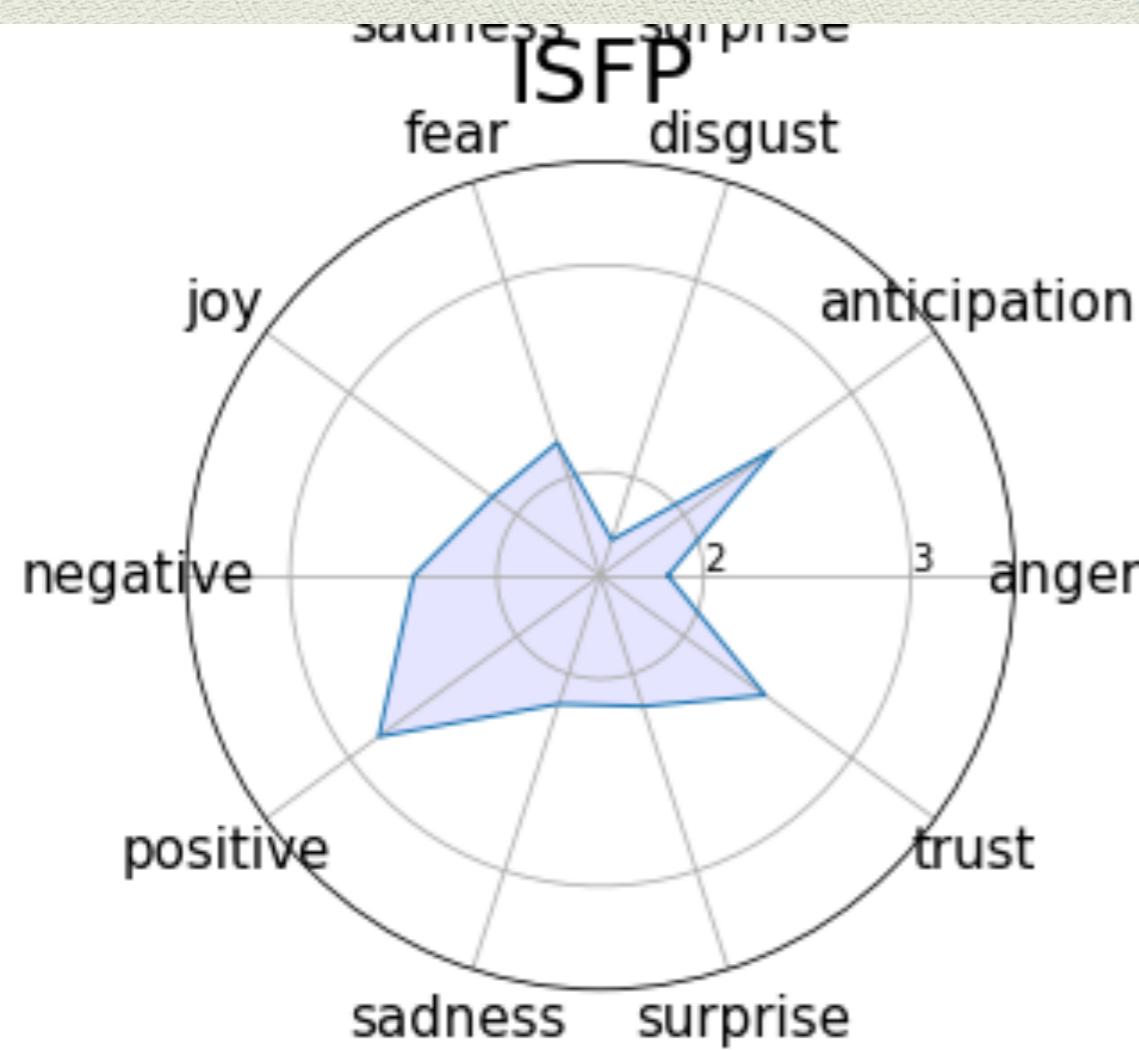
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ISFJ



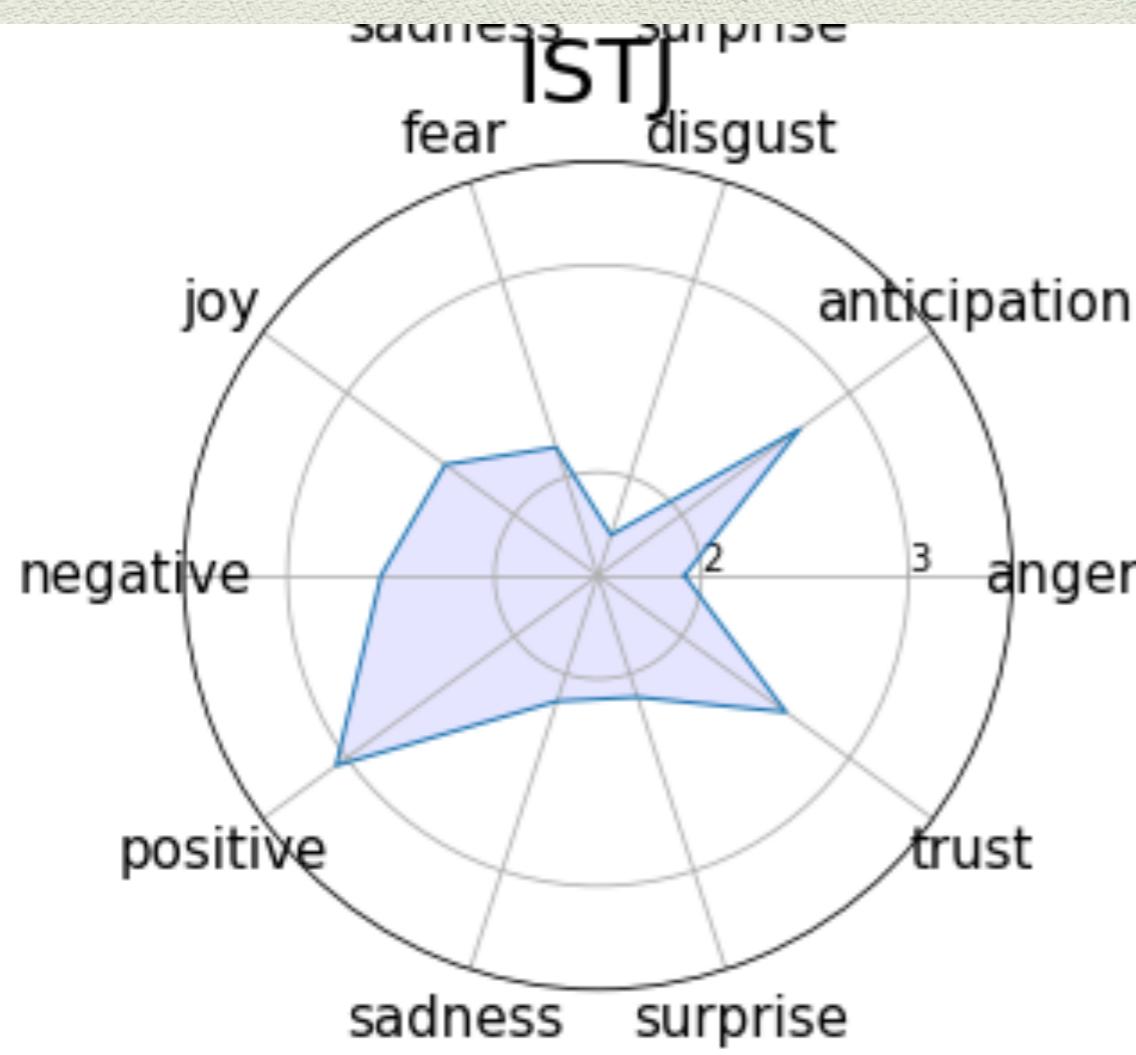
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ISFP

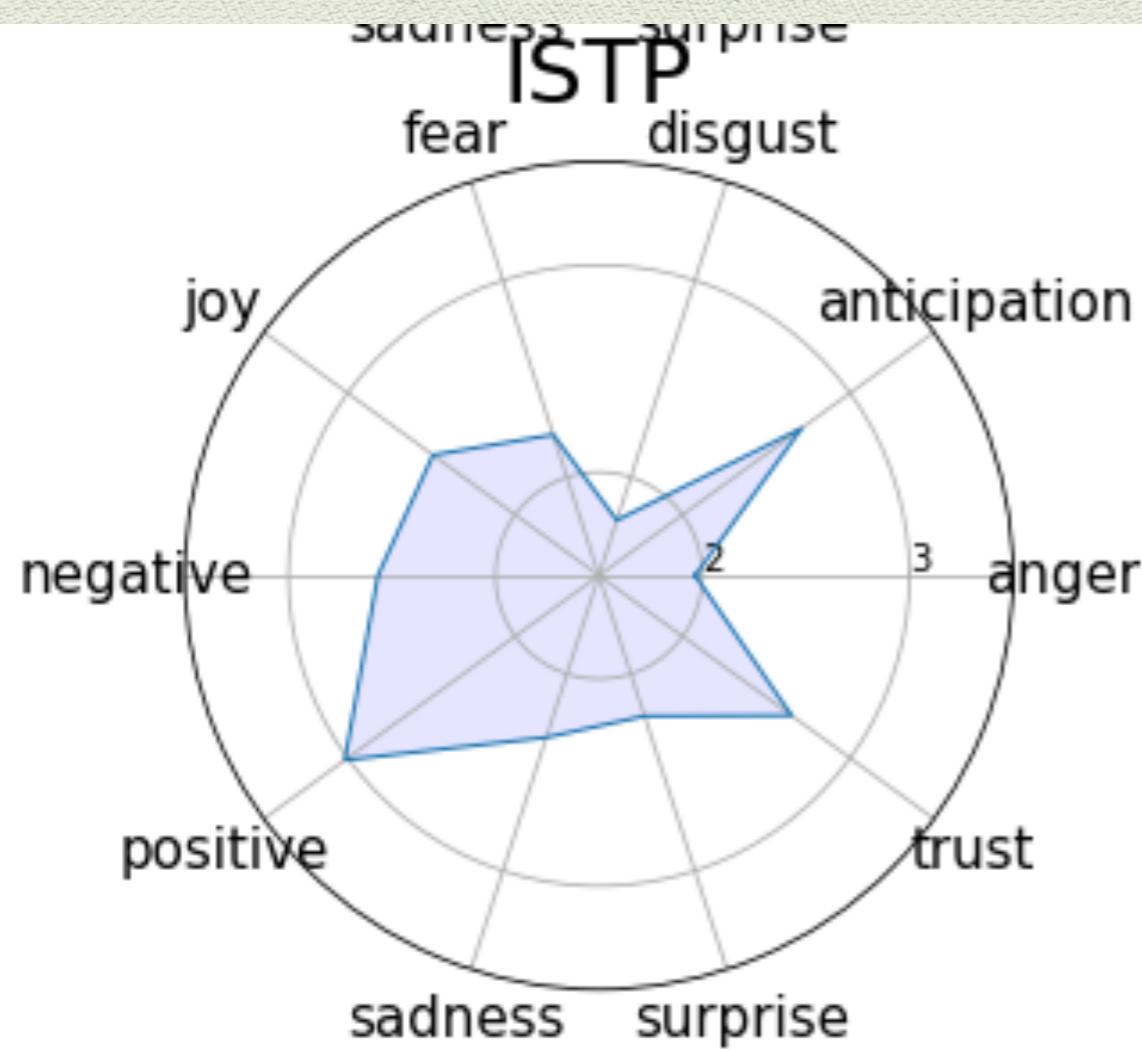


post lot back
real call live
saw ask say
show good reason
kind everyone
guy talk laugh
almost group
art movi draw
probabl year last
tell make use emot
onli someon love
work veri song music
believ. tri look
seem repli actual long
only friend kid girl
general song day
guess best advic
social notic
yes self life
recent dream fit
read alway still
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help fi whi enough
O bad never
so sorri hope
put stuff rememb
sound

ISTJ



ISTP



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got long
person need
onli never
make right
stuff guess
only love
lot go someon
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